



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,328	11/24/2003	Robin A. Reeder	PD-02W189	4312

7590 07/27/2007  
John E. Gunther  
Raytheon Company  
P.O. Box 902 (E1/E150)  
El Segundo, CA 90245-0902

EXAMINER
----------

NGUYEN, DUNG T

ART UNIT	PAPER NUMBER
----------	--------------

2828

MAIL DATE	DELIVERY MODE
-----------	---------------

07/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/720,328

Applicant(s)

REEDER ET AL.

Examiner

Dung (Michael) T. Nguyen

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-25 and 27-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-24 and 33-46 is/are allowed.
- 6) ☒ Claim(s) 1,3-8,25 and 27-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f)..
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-8, 25, and 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (APA) in this instant application.

With respect to claims 1, 3, 25, and 27, Fig.3 shows an apparatus comprising:

first means including a gain medium (12) for providing a collimated beam of electromagnetic energy with a predetermined orientation with respect to a line of sight thereof, and

second means (porro prisms 14 & 24) for rotating said beam such that a transverse mode selection (beam reflected from porro prism 14) therefor relative to said gain medium is the same for two orthogonal directions thereof.

However, Fig.3 lacks a slab laser.

Fig.2 and page 1, lines 25-26 in the instant specification disclose a slab laser.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace Fig.3 what is taught by Fig.2 because the slab laser and the rod laser can be alternate in the solid state lasers (lines 25-26 in the instant specification).

Art Unit: 2828

With respect to claims 4 and 28, Fig.3 shows said prism is rotated 45 degrees about the line of sight with respect to slab axes (as pointed out on page 9, lines 9-10, a porro prism is rotated 45 degrees and therefore the Fig.3 porro prism must do the same).

With respect to claims 5 and 29, Fig.3 shows the beam is rotated through two successive round trip passes through said slab.

With respect to claims 6-7 and 30-31, page 11, lines 17-18 disclose an anamorphic telescope.

With respect to claims 8 and 32, page 2, line 20-21 discloses the (intra-cavity) telescope disposed between said slab and said prism.

***Allowable Subject Matter***

Claims 9 and 33 have been indicated allowed in the previous office action.

Claims 10-23 and 34-46 have been found allowable due to their dependency on claims 9 and 33.

Claim 24 has been indicated allowed in the previous office action.

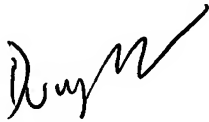
Art Unit: 2828

### **Communication Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung (Michael) T Nguyen whose telephone number is (571) 272-1949. The examiner can normally be reached on 9:00 - 19:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Harvey can be reached on (571) 272-1835. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 306-5511 for regular communications and (703) 306-5511 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.



Nguyen (Michael) Dung

6/29/07